Student Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The Essentials for Science

1. Lab safety rules are to avoid injuries
2. Refraction is bending (eyeglasses and mag. glass), reflection is bouncing (mirror)
3. Sound vibrates
4. Metals conduct heat and electricity; plastic, glass, and wood are insulators.
5. Tides occur twice per day
6. Planet order: MVEMJSUNP; my very educated mother just served us nine pies
7. Rotation = 24 hours = day and night
8. Revolution = 365 ¼ days = 1 year
9. Tilt causes seasons. No tilt = no seasons
10. Lane #1 on a race track is best because it is shorter to run around the track in Lane#1. Mercury goes around the Sun fastest, because it is closer to the Sun (Lane #1). Earth is 3rd fastest (lane #3)
11. Moon….light on the right, the moon is getting bright
12. Sun is the source of all energy and light on Earth and is in the middle of the solar system.
13. Producers are plants and grass; Consumers are wolves and frogs who eat stuff to get energy
14. Plants absorb sunlight, breathe in CO2, and release O2 (photosynthesis)
15. Food chains show energy transferring from one organism into another.
16. Inherited your born with a trait; Learned behaviors are taught
17. Clay or play-dough is good for making fossils.
18. The oldest rock is on the bottom (bedrock). Youngest rock on top (surface)
19. What you start with is what you end with. Start with 10 grams or salt, end with 10 grams of salt after evaporating it.
20. Mixtures can be separated using a filter and the physical properties stay the same
21. Solutions are a type of mixture that looks the same throughout. Ex. Salt water, sugar water
22. Sand can be filtered and salt water can be evaporated to separate
23. Iron is Magnetic. Use a magnet to separate mixtures that are made of iron.
24. Liquid 🡪 gas is evaporation a.k.a. boiling
25. Condensation is in the clouds when water vapor turns to liquid; precipitation is rain falling
26. Erosion is tearing down, deposition is building up
27. The mouth is the river is the end of it; a delta is a fan shape at the end of the river
28. Glaciers form valleys; rivers form canyons (Colorado river formed the Grand Canyon)
29. Mass never changes. Weight does change. So if you are the moon, your mass is different.
30. Triple beam balance is for finding the mass. Grams and kilograms are the units
31. A Graduated cylinder is for finding volume of a liquid. Liters and milliliters are the units.
32. There can only be one variable. Find it
33. Inexhaustible energy is energy man cannot “mess up”: sun, water, air
34. Renewable is energy that will be there if we take care of it: Trees, crops, animals
35. Nonrenewable is energy that Mother Nature made once and only once: Fossil fuels (oil, coal, natural gas) and minerals.